

**I CLAIM AS MY INVENTION:**

1. An injection vaporizer comprising:

    a reservoir for liquid to be vaporized;

    a delivery conduit having an outlet for injecting liquid to be vaporized into a gas space ;

    a pumping system operable to transfer liquid from the reservoir to the outlet;

    a heater for supplying thermal energy into the delivery conduit; and

    a pressure generator for generating an elevated delivery pressure within the delivery conduit and cooperating with the heater to establish a heated pressurized liquid at the outlet.

2. A vaporizer as claimed in claim 1 wherein the pressure generator comprises a pressure regulator in fluid communication with the outlet and responsive to pressure levels within the delivery conduit to inhibit egress of transferred liquid from the outlet until the elevated delivery pressure is generated.

3. A vaporizer as claimed in claim 1 wherein the pumping system also pressurizes the liquid to generate the elevated delivery pressure.

4. A vaporizer as claimed in claim 1 wherein the pumping system comprises a pair of pistons, each mounted for reciprocation within an associated pump chamber forming the reservoir and connected to a drive to

operate with pump strokes having a relative phase difference of substantially 180 degrees.

5. A vaporizer as claimed claim 1 wherein the heater supplies thermal energy in an amount to heat the liquid within the delivery conduit to a temperature of at least the boiling point of the liquid at a pressure externally of the outlet.